As filed with the Securities and Exchange Commission on March 19, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Quanterix Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

20-8957988 (I.R.S. Employer Identification No.)

113 Hartwell Avenu Lexington, MA (Address of Principal Executive Offices)

> 2007 Stock Option and Grant Plan, as amended 2017 Employee Stock Purchase Plan 2017 Employee, Director and Consultant Equity Incentive Plan (Full title of the plans)

E. Kevin Hrusovsky Executive Chairman, President and Chief Executive Officer Quanterix Corporation 113 Hartwell Avenue Lexington, MA 02421

(617) 301-9400 (Name, address and telephone number, including area code, of agent for service)

Copies to:

William T. Whelan, Esq. Megan N. Gates, Esq. John P. Condon, Esq. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. One Financial Center Boston, MA 02111 (617) 542-6000 Facsimile: (617) 542-2241

Brian P. Keane, Esq. General Counsel Quanterix Corporation 113 Hartwell Avenue Lexington, MA 02421 (617) 301-9400

Accelerated filer o

Smaller reporting company o Emerging growth company x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer x (Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Propo Maxin Aggre Offering	num :gate g Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	3,708,597 shares	\$6.05 to \$21.19(2)	\$ 42	2,802,481.51(2) \$	5,328.91
(1) The number of shares of common stock, par value \$0.001 per share ("Common Stock"), exercise of options which have been granted under the Registrant's 2007 Stock Option a Registrant's 2017 Employee, Director and Consultant Equity Incentive Plan (the "2017) exercise of options or issuance of stock-based awards which may hereafter be granted un with the 2017 Plan and the 2007 Plan, the "Plans"). The maximum number of shares wh to adjustment in accordance with certain antidiution and other provisions of the Plans. Statement covers, in addition to the number of shares stated above, an indeterminate number of shares values of statement covers.	nd Grant Plan, as amended (th Plan"), (iii) upon the vesting c nder the 2017 Plan, and (v) pu ich may be sold upon the exer Accordingly, pursuant to Rule	ne "2007 Plan"), (ii) upon the of outstanding restricted stock rsuant to the Registrant's 201 rcise of such options or issuan 416 under the Securities Act of	exercise of options units which have b 7 Employee Stock ce of such shares o of 1933, as amende	s which have been gr been granted under th Purchase Plan (the " or stock-based awards ed (the "Securities Ad	anted under the ne 2017 Plan, (iv) upon the 2017 ESPP", and together s under the Plans is subject ct"), this Registration

provisions. Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) and Rule 457(h) promulgated under the Securities Act. The offering price per share and the aggregate (2)Estimated solely for the purpose of calculating the amount of the registration ree pursuant to Kule 457(c) and Kule 457(c) more Kule 457(c) and Kule 457(c) an

Securities	Number of Shares	Offering Price Per Share (2)	Aggregate Offering Price
Shares issuable upon the exercise of outstanding options granted under the 2007 Plan	2,204,084	\$ 6.05(2)(a)	\$ 13,334,708.20
Shares issuable upon the exercise of outstanding options granted under the 2017 Plan	227,869	\$ 21.19(2)(a)	\$ 4,828,544.11
Shares issuable upon vesting of outstanding restricted stock units granted under the 2017 Plan	10,000	\$ 19.30(2)(b)	\$ 193,000.00
Shares reserved for future grant or issuance under the 2017 Plan	839,339(3)	\$ 19.30(2)(b)	\$ 16,199,242.70
Shares reserved for future issuance under the 2017 ESPP	427,305(4)	\$ 19.30(2)(b)	\$ 8,246,986.50
Proposed Maximum Aggregate Offering Price			\$ 42,802,481.51
Registration Fee			\$ 5.328.91

Registration Fee

The number of shares reserved for issuance under the 2017 Plan will automatically increase on January 1st each year, starting on January 1, 2019 and continuing through January 1, 2027, by the lesser of (i) 4% of (3)the number of shares of Common Stock outstanding on such date, and (ii) such number of shares of Common Stock as determined by the Registrant's board of directors, subject to adjustment upon changes in capitalization of the Registrant as provided in the plan. The number of shares reserved for issuance under the 2017 ESPP will automatically increase on January 1st each year, starting on January 1, 2018 and continuing through January 1, 2027, by the lesser of (i) 1.0%

(4)of the total number of shares of Common Stock outstanding on the last day of the immediately preceding fiscal year, and (ii) such number of shares of Common Stock as determined by the Registrant's board of directors, subject to adjustment upon changes in capitalization of the Registrant as provided in the plan. The 427,305 shares of Common Stock reserved for future issuance under the 2017 ESPP covered by this Registration Statement include the additional 218,842 shares of Common Stock reserved under the 2017 ESPP as a result of the automatic increase on January 1, 2018.

02421 (Zip Code)

EXPLANATORY NOTE

In accordance with the instructional Note to Part I of Form S-8 as promulgated by the Securities and Exchange Commission (the "Commission"), the information specified by Part I of Form S-8 has been omitted from this Registration Statement on Form S-8 for offers of Common Stock pursuant to the Plans. The documents containing the information specified in Part I will be delivered to the participants in the Plans covered by this Registration Statement as required by Rule 428(b)(1) under the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission are incorporated herein by reference:

(a) the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the Commission on March 19, 2018;

and

(b) the description of the Registrant's Common Stock which is contained in the Registrant's Registration Statement on Form 8-A (File No. 001-38319) filed with the Commission on December 6, 2017, including any amendment or report filed for the purpose of updating such description.

All reports and other documents filed by the Registrant after the date hereof pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the issuance of the shares of Common Stock registered under this Registration Statement has been passed upon for the Registrant by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("Mintz Levin"). As of the date of this Registration Statement, an entity affiliated with Mintz Levin owns 8,477 shares of Common Stock.

Item 6. Indemnification of Directors and Officers.

Section 145(a) of the Delaware General Corporation Law, or DGCL, provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the

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best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of the corporation or suit if he or she acted in good faith and in a manner he or she reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses that the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

The Registrant's restated certificate of incorporation, or the Charter, provides that no director of the Registrant shall be personally liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, the Charter provides that if the DGCL is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the Registrant shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

The Charter further provides that any repeal or modification of such article by the Registrant's stockholders or amendment to the DGCL will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

The Registrant's restated by-laws, or the By-Laws, provide that the Registrant will indemnify each of its directors and officers and, in the discretion of its board of directors, certain employees, to the fullest extent permitted by the DGCL as the same may be amended (except that in the case of amendment, only to the extent that the amendment permits the Registrant to provide broader indemnification rights than the DGCL permitted it to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of the Registrant, or at the Registrant's request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Registrant and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The By-Laws further provide for the advancement of expenses to each of the directors and officers and, in the discretion of the board of directors, to certain employees and agents.

In addition, the By-Laws provide that the right of each of the Registrant's directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, the By-Laws authorize the Registrant to provide insurance for its directors, officers, employees and agents against any liability, whether or not it would have the power to indemnify such person against such liability under the DGCL or the provisions of our By-Laws.

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The Registrant has also entered into indemnification agreements with each of its directors and executive officers. These agreements provide that the Registrant will indemnify each of its directors and such officers to the fullest extent permitted by law and the Charter and By-Laws.

The Registrant also maintains a general liability insurance policy, which covers certain liabilities of its directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

The foregoing discussion of the Charter, By-Laws, indemnification agreements and the DGCL is not intended to be exhaustive and is qualified in its entirety by such Charter, By-Laws, indemnification agreements or law.

Item 7. Exemption from Registration Claimed.

Not applicable.

Incornorated by

Item 8. Exhibits.

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
4.1	Form of Common Stock Certificate of the Registrant		S-1 (Exhibit 4.1)	11/9/2017	333-221475
4.2	Amended and Restated Certificate of Incorporation of the Registrant		8-K (Exhibit 3.1)	12/15/2017	001-38319
4.3	Restated Bylaws of the Registrant		8-K (Exhibit 3.2)	12/15/2017	001-38319
4.4	Common Stock Purchase Warrant, dated January 30, 2018, issued to Azul Divinal Consultoria Unipessoal Lda.		10-K (Exhibit 4.9)	3/15/2018	001-38319
4.5	Form of Warrant to Purchase Series A-2 Preferred Stock of the Registrant issued to Silicon Valley Bank		S-1 (Exhibit 4.2)	11/9/2017	333-221475
4.6	Form of Warrant to Purchase Series C Preferred Stock of the Registrant		S-1 (Exhibit 4.3)	11/9/2017	333-221475
4.7	<u>Warrant Agreement, dated as of April 14,</u> 2014, by and between the Registrant and <u>Hercules Capital, Inc. (formerly known as</u> <u>Hercules Technology Group Capital, Inc.)</u>		S-1 (Exhibit 4.4)	11/9/2017	333-221475
4.8	<u>Warrant Agreement, dated as of January 29,</u> 2016, by and between the Registrant and		S-1 (Exhibit 4.5)	11/9/2017	333-221475

	<u>Hercules Capital, Inc. (formerly known as</u> <u>Hercules Technology Group Capital, Inc.)</u>				
4.9	<u>Warrant Agreement, dated as of March 31,</u> 2017, <u>by and between the Registrant and</u> <u>Hercules Capital, Inc. (formerly known as</u> <u>Hercules Technology Group Capital, Inc.)</u>		S-1 (Exhibit 4.6)	11/9/2017	333-221475
4.10	<u>Fourth Amended and Restated Stockholders</u> <u>Agreement, dated as of June 2, 2017, by and</u> <u>among the Registrant and the stockholders</u> <u>named therein</u>		S-1 (Exhibit 4.7)	11/9/2017	333-221475
4.11	<u>Fourth Amended and Restated Registration</u> <u>Rights Agreement, dated as of June 2, 2017, by</u> <u>and among the Registrant and the investors</u> <u>named therein</u>		S-1 (Exhibit 4.8)	11/9/2017	333-221475
5.1	<u>Opinion of Mintz, Levin, Cohn, Ferris,</u> <u>Glovsky and Popeo, P.C. as to the legality of</u> <u>the securities being registered</u>	Х			
23.1	Consent of Ernst & Young LLP	Х			
23.2	<u>Consent of Mintz, Levin, Cohn, Ferris,</u> <u>Glovsky and Popeo, P.C. (included in</u> <u>Exhibit 5.1)</u>	Х			
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Exhibit <u>N</u> umber	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
24.1	<u>Powers of Attorney (included on signature</u> <u>page to this Registration Statement)</u>	Х			
99.1	2007 Stock Option and Grant Plan, as amended		S-1 (Exhibit 10.1.1)	11/9/2017	333-221475
99.2	Form of Incentive Stock Option Agreement under the 2007 Stock Option and Grant Plan, as amended		S-1 (Exhibit 10.1.2)	11/9/2017	333-221475
99.3	<u>Form of Non-qualified Stock Option</u> <u>Agreement under the 2007 Stock Option and</u> <u>Grant Plan, as amended</u>		S-1 (Exhibit 10.1.3)	11/9/2017	333-221475
99.4	Form of Restricted Stock Agreement under the 2007 Stock Option and Grant Plan, as amended		S-1 (Exhibit 10.1.4)	11/9/2017	333-221475
99.5	2017 Employee Stock Purchase Plan	Х			
99.6	<u>2017 Employee, Director and Consultant</u> <u>Equity Incentive Plan</u>		S-1/A (Exhibit 10.2.1)	11/27/2017	333-221475
99.7	Form of Stock Option Agreement under the 2017 Employee, Director and Consultant Equity Incentive Plan		S-1/A (Exhibit 10.2.2)	11/27/2017	333-221475
99.8	<u>Form of Restricted Stock Agreement under the</u> <u>2017 Employee, Director and Consultant</u> <u>Equity Incentive Plan</u>		S-1/A (Exhibit 10.2.3)	11/27/2017	333-221475
99.9	<u>Form of Restricted Stock Unit Agreement</u> <u>under the 2017 Employee, Director and</u> <u>Consultant Equity Incentive Plan</u>		S-1/A (Exhibit 10.2.4)	11/27/2017	333-221475
			(EAHIOR 10.2.4)		

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in

volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (1)(i) and (1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions summarized in Item 6, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling present will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Lexington, Commonwealth of Massachusetts, on March 19, 2018.

QUANTERIX CORPORATION

By: /s/ E. Kevin Hrusovsky

E. Kevin Hrusovsky Chairman, President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

Each of the directors and officers of Quanterix Corporation whose signature appears below hereby severally constitutes and appoints E. Kevin Hrusovsky and Joseph Driscoll, and each of them singly, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them singly, for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of Quanterix Corporation, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature

Title

Date

/s/ E. Kevin Hrusovsky E. Kevin Hrusovsky	Chairman, President, Chief Executive Officer and Director (principal executive officer)	March 19, 2018
/s/ Joseph Driscoll Joseph Driscoll	Chief Financial Officer (principal financial officer and principal accounting officer)	March 19, 2018
/s/ Douglas G. Cole, M.D. Douglas G. Cole, M.D.	Director	March 19, 2018
/s/ John M. Connolly John M. Connolly	Director	March 19, 2018
/s/ Keith L. Crandell Keith L. Crandell	Director	March 19, 2018
/s/ Marijn Dekkers, Ph. D. Marijn Dekkers, Ph. D.	Director	March 19, 2018
/s/ Martin D. Madaus, Ph.D. Martin D. Madaus, Ph.D.	Director	March 19, 2018
/s/ Paul M. Meister Paul M. Meister	Director	March 19, 2018
/s/ David R. Walt, Ph.D. David R. Walt, Ph.D.	Director	March 19, 2018
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MINTZ LEVIN

Exhibit 5.1

March 19, 2018

Quanterix Corporation 113 Hartwell Avenue Lexington, MA 02421

Ladies and Gentlemen:

We have acted as legal counsel to Quanterix Corporation, a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-8 (the "Registration Statement"), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended (the "Securities Act"), of an aggregate of 3,708,597 shares (the "Shares") of the Company's common stock, \$0.001 par value per share ("Common Stock"), in accordance with the terms of the Company's 2017 Employee, Director and Consultant Equity Incentive Plan, the Company's 2007 Stock Option and Grant Plan, as amended, and the Company's 2017 Employee Stock Purchase Plan (collectively, the "Plans"). This opinion is being rendered in connection with the filing of the Registration Statement with the Commission. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company's Amended and Restated Certificate of Incorporation and Restated Bylaws, each as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company's officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such copies, and the truth and correctness of any representations and warranties contained therein. In addition, we have assumed that the Company will receive any required consideration in accordance with the terms of the Plans.

Our opinion expressed herein is limited to the General Corporation Law of the State of Delaware, and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

Based upon the foregoing, we are of the opinion that the Shares, when issued and delivered in accordance with the terms of the Plans, will be validly issued, fully paid and non-assessable.

We understand that you wish to file this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours, /s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. 2

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2007 Stock Option and Grant Plan of Quanterix Corporation, the 2017 Employee, Director and Consultant Equity Incentive Plan of Quanterix Corporation, and the 2017 Employee Stock Purchase Plan of Quanterix Corporation of our report dated March 19, 2018 with respect to the consolidated financial statements of Quanterix Corporation included in its Annual Report (Form 10-K) for the year ended December 31, 2017 filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts March 19, 2018

QUANTERIX CORPORATION

2017 EMPLOYEE STOCK PURCHASE PLAN

The following constitute the provisions of the 2017 Employee Stock Purchase Plan (the "Plan") of Quanterix Corporation (the "Company").

Purpose. The purpose of the Plan is to provide Employees of the Company and its Designated Subsidiaries with an opportunity to purchase 1. Common Stock of the Company. It is the intention of the Company to have the Plan qualify as an "Employee Stock Purchase Plan" under Section 423 of the Code. The provisions of the Plan shall, accordingly, be construed so as to extend and limit participation in a manner consistent with the requirements of that section of the Code.

2. Definitions.

"Board" shall mean the Board of Directors of the Company, or a committee of the Board of Directors named by the Board to administer the (a) Plan.

- (b) "Code" shall mean the Internal Revenue Code of 1986, as amended.
- "Common Stock" shall mean the common stock, \$0.001 par value per share, of the Company. (c)
- (d) "Company" shall mean Quanterix Corporation, a Delaware corporation.

"Compensation" shall mean total base salary received by the Employee from the Company or a Designated Subsidiary that is taxable (e) income for federal income tax purposes, excluding payments for overtime, shift premium, incentive compensation, incentive payments, bonuses, commissions and other compensation received from the Company or a Designated Subsidiary, relocation, expense reimbursements, tuition or other reimbursements and income realized as a result of participation in any stock option, stock purchase or similar plan of the Company or a Designated Subsidiary.

(f) "Continuous Status as an Employee" shall mean the absence of any interruption or termination of service as an Employee. Continuous Status as an Employee shall not be considered interrupted in the case of a leave of absence agreed to in writing by the Company, provided that such leave is for a period of not more than 90 days or reemployment upon the expiration of such leave is guaranteed by contract or statute.

"Contributions" shall mean all amounts credited to the account of a participant pursuant to the Plan. (g)

"Designated Subsidiaries" shall mean the Subsidiaries which have been designated by the Board from time to time in its sole discretion as (h) eligible to participate in the Plan.

(i) "Employee" shall mean any person who is employed by the Company or one of its Designated Subsidiaries for tax purposes and who is customarily employed for at least 20 hours per week and more than five months in a calendar year by the Company or one of its Designated Subsidiaries.

"Exercise Date" shall mean the last business day of each Offering Period of the Plan. (j)

(k)"Exercise Price" shall mean with respect to an Offering Period, an amount equal to 85% of the fair market value (as defined in paragraph 7(b)) of a share of Common Stock on the Offering Date or on the Exercise Date, whichever is lower.

"Offering Date" shall mean the first business day of each Offering Period of the Plan, except that in the case of an individual who becomes (1)an eligible Employee after the first business day of an Offering Period but on or prior to the first business day of the fourth calendar month within such Offering Period, the term "Offering Date" shall mean the first business day of such fourth calendar month coinciding with or next succeeding the day on which that individual becomes an eligible Employee.

Options granted after the first business day of an Offering Period will be subject to the same terms as the options granted on the first business day of such Offering Period except that they will have a different grant date (thus, potentially, a different exercise price) and, because they expire at the same time as the options granted on the first business day of such Offering Period, a shorter term.

(m) "Offering Period" shall mean a period of six months as set forth in paragraph 4 of the Plan.

"Plan" shall mean this Quanterix Corporation 2017 Employee Stock Purchase Plan. (n)

"Subsidiary" shall mean a corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a (0)Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.

3. Eligibility.

Any person who has been continuously employed as an Employee for three months as of the Offering Date of a given Offering Period shall (a) be eligible to participate in such Offering Period under the Plan and further, subject to the requirements of paragraph 5(a) and the limitations imposed by Section 423(b) of the Code. All Employees granted options under the Plan with respect to any Offering Period will have the same rights and privileges except for any differences that may be permitted pursuant to Section 423.

Any provisions of the Plan to the contrary notwithstanding, no Employee shall be granted an option under the Plan (i) if, immediately after (b) the grant, such Employee (or any other person whose stock would be attributed to such Employee pursuant to Section 424(d) of the Code) would own stock and/or hold outstanding options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any Subsidiary of the Company, (ii) which permits his or her rights to purchase stock under all employee stock purchase plans (described

in Section 423 of the Code) of the Company and its Subsidiaries to accrue at a rate which exceeds \$25,000 of fair market value of such stock as defined in paragraph 7(b) (determined at the time such option is granted) for each calendar year in which such option is outstanding at any time, or (iii) to purchase more than 10,000 shares (subject to any adjustment pursuant to paragraph 18) of Common Stock in any one Offering Period. Any option granted under the Plan shall be deemed to be modified to the extent necessary to satisfy this paragraph 3(b).

4. <u>Offering Periods</u>. The Plan shall be implemented by a series of Offering Periods, with a new Offering Period commencing on March 1 and September 1 of each year or the first business day thereafter (or at such other time or times as may be determined by the Board) The initial Offering Period shall commence at a time to be determined by the Board.

5. <u>Participation</u>.

(a) Except as set forth in paragraph 27 for the Initial Offering Period, an eligible Employee may become a participant in the Plan by completing an Enrollment Form provided by the Company and filing it with the Company or its designee prior to the applicable Offering Date, unless a later time for filing the Enrollment Form is set by the Board for all eligible Employees with respect to a given Offering Period. The Enrollment Form and its submission may be electronic as directed by the Company. The Enrollment Form shall set forth the percentage of the participant's Compensation (which shall be not less than 1% and not more than 15% to be paid as Contributions pursuant to the Plan.

(b) Except as set forth in paragraph 27 for the Initial Offering Period, payroll deductions shall commence with the first payroll following the Offering Date, unless a later time is set by the Board with respect to a given Offering Period, and shall end on the last payroll paid on or prior to the Exercise Date of the Offering Period to which the Enrollment Form is applicable, unless sooner terminated as provided in paragraph 10.

6. <u>Method of Payment of Contributions</u>.

(a) Each participant shall elect to have payroll deductions made on each payroll during the Offering Period in an amount not less than 1% and not more than 15% of such participant's Compensation on each such payroll; provided that the aggregate of such payroll deductions during the Offering Period shall not exceed 15% of the participant's aggregate Compensation during said Offering Period (or such other percentage as the Board may establish from time to time before an Offering Date). All payroll deductions made by a participant shall be credited to his or her account under the Plan. A participant may not make any additional payments into such account.

(b) A participant may discontinue his or her participation in the Plan as provided in paragraph 10, or, on one occasion only during the Offering Period, may decrease, but may not increase, the rate of his or her Contributions during the Offering Period by completing and filing with the Company a new Enrollment Form authorizing a change in the deduction rate. The change in rate shall be effective as of the beginning of the next payroll period following the date of filing of the new Enrollment Form, if the Enrollment Form is completed at least ten business days prior to such date, and, if not, as of the beginning of the next succeeding payroll period.

(c) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and paragraph 3(b), a participant's payroll deductions may be decreased to 0% at such time during any Offering Period which is scheduled to end during the current calendar year that the aggregate of all payroll deductions accumulated with respect to such Offering Period and any other Offering Period ending within the same calendar year equals \$21,250. Payroll deductions shall recommence at the rate provided in such participant's Enrollment Form at the beginning of the first Offering Period which is scheduled to end in the following calendar year, unless terminated by the participant as provided in paragraph 10.

7. <u>Grant of Option</u>.

(a) On the Offering Date of each Offering Period, each eligible Employee participating in such Offering Period shall be granted an option to purchase on the Exercise Date of such Offering Period a number of shares of the Common Stock determined by dividing such Employee's Contributions accumulated prior to such Exercise Date and retained in the participant's account as of the Exercise Date by the applicable Exercise Price; provided however, that such purchase shall be subject to the limitations

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set forth in paragraphs 3(b) and 12. The fair market value of a share of the Common Stock shall be determined as provided in paragraph 7(b).

(b) The fair market value of the Common Stock on a given date shall be (i) if the Common Stock is listed on a national securities exchange or traded in the over-the-counter market and sales prices are regularly reported for the Common Stock, the closing or last sale price of the Common Stock for such date (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), on the composite tape or other comparable reporting system; or (ii) if the Common Stock is not listed on a national securities exchange and such price is not regularly reported, the mean between the bid and asked prices per share of the Common Stock at the close of trading in the over-the-counter market.

8. Exercise of Option. Unless a participant withdraws from the Plan as provided in paragraph 10, his or her option for the purchase of shares will be exercised automatically on the Exercise Date of the Offering Period, and the maximum number of full shares subject to the option will be purchased for him or her at the applicable Exercise Price with the accumulated Contributions in his or her account. If a fractional number of shares results, then such number shall be rounded down to the next whole number and any unapplied cash shall be carried forward to the next Exercise Date, unless the participant requests a cash payment. The shares purchased upon exercise of an option hereunder shall be deemed to be transferred to the participant on the Exercise Date. During a participant's lifetime, a participant's option to purchase shares hereunder is exercisable only by him or her.

9. <u>Delivery</u>. Upon the written request of a participant, certificates representing the shares purchased upon exercise of an option will be issued as promptly as practicable after the Exercise Date of each Offering Period to participants who wish to hold their shares in certificate form, except that the Board may determine that such shares shall be held for each participant's benefit by a broker designated by the Board. Any payroll deductions accumulated in a participant's account which are not sufficient to purchase a full Share shall be retained in the participant's account for the subsequent Offering Period,

subject to earlier withdrawal by the participant as provided in paragraph 10 below. Any other amounts left over in a participant's account after an Exercise Date shall be returned to the participant.

10. <u>Withdrawal; Termination of Employment</u>.

(a) A participant may withdraw all but not less than all the Contributions credited to his or her account under the Plan at any time prior to the Exercise Date of the Offering Period by giving written notice to the Company or its designee. All of the participant's Contributions credited to his or her account will be paid to him or her promptly after receipt of his or her notice of withdrawal and his or her option for the current period will be automatically terminated, and no further Contributions for the purchase of shares will be made during the Offering Period.

(b) Upon termination of the participant's Continuous Status as an Employee prior to the Exercise Date of the Offering Period for any reason, including retirement or death, the Contributions credited to his or her account will be returned to him or her or, in the case of his or her death, to the person or persons entitled thereto under paragraph 14, and his or her option will be automatically terminated.

(c) In the event an Employee fails to remain in Continuous Status as an Employee for at least 20 hours per week during the Offering Period in which the Employee is a participant, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to his or her account will be returned to him or her and his or her option terminated.

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(d) A participant's withdrawal from an Offering Period will not have any effect upon his or her eligibility to participate in a succeeding offering or in any similar plan which may hereafter be adopted by the Company.

11. <u>Interest</u>. No interest shall accrue on the Contributions of a participant in the Plan.

12. <u>Stock</u>

(a) The maximum number of shares of Common Stock which shall be made available for sale under the Plan shall be 208,463 shares, plus an annual increase on the first day of each of the Company's fiscal years beginning in 2018, equal to the lesser of (i) one percent (1%) of the shares of Common Stock outstanding on the last day of the immediately preceding fiscal year, or (ii) such lesser number of shares as is determined by the Board, subject to adjustment upon changes in capitalization of the Company as provided in paragraph 18. If the total number of shares which would otherwise be subject to options granted pursuant to paragraph 7(a) on the Offering Date of an Offering Period exceeds the number of shares then available under the Plan (after deduction of all shares for which options have been exercised), the Company shall make a pro rata allocation of the shares remaining available for option grants in as uniform a manner as shall be practicable and as it shall determine to be equitable. Any amounts remaining in an Employee's account not applied to the purchase of shares pursuant to this paragraph 12 shall be refunded on or promptly after the Exercise Date. In such event, the Company shall give written notice of such reduction of the number of shares subject to the option to each Employee affected thereby and shall similarly reduce the rate of Contributions, if necessary.

(b) The participant will have no interest or voting right in shares covered by his or her option until such option has been exercised.

13. <u>Administration</u>. The Board shall supervise and administer the Plan and shall have full power to adopt, amend and rescind any rules deemed desirable and appropriate for the administration of the Plan and not inconsistent with the Plan, to construe and interpret the Plan, and to make all other determinations necessary or advisable for the administration of the Plan.

14. <u>Designation of Beneficiary</u>.

(a) A participant may designate a beneficiary who is to receive any shares and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to the end of the Offering Period but prior to delivery to him or her of such shares and cash. In addition, a participant may designate a beneficiary who is to receive any cash from the participant's account under the Plan in the event of such participant's death prior to the Exercise Date of the Offering Period. If a participant is married and the designated beneficiary is not the spouse, spousal consent shall be required for such designation to be effective. Beneficiary designations shall be made either in writing or by electronic delivery as directed by the Company.

(b) Such designation of beneficiary may be changed by the participant (and his or her spouse, if any) at any time by submission of the required notice, which may be electronic. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such shares and/or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

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15. <u>Transferability</u>. Neither Contributions credited to a participant's account nor any rights with regard to the exercise of an option or to receive shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in paragraph 14) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with paragraph 10.

16. <u>Use of Funds</u>. All Contributions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such Contributions.

17. <u>Reports</u>. Individual accounts will be maintained for each participant in the Plan. Statements of account will be given to participating Employees promptly following the Exercise Date, which statements will set forth the amounts of Contributions, the per share purchase price, the number of shares purchased and the remaining cash balance, if any.

18. Adjustments Upon Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by unexercised options under the Plan and the number of shares of Common Stock which have been authorized for issuance under the Plan but are not yet subject to options under paragraph 12(a), the number of shares of Common Stock set forth in paragraph 12(a)(i) (collectively, the "Reserves"), the maximum number of shares of Common Stock that may be purchased by a participant in an Offering Period set forth in paragraph 3(b), as well as the price per share of Common Stock covered by each unexercised option under the Plan, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock. Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive.

In the event of the proposed dissolution or liquidation of the Company, an Offering Period then in progress will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the assets of the Company, or the merger, consolidation or other capital reorganization of the Company with or into another corporation, each option outstanding under the Plan shall be assumed or an equivalent option shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation, unless the Board determines, in the exercise of its sole discretion and in lieu of such assumption or substitution, to shorten the Offering Period then in progress by setting a new Exercise Date (the "New Exercise Date"). If the Board shortens the Offering Period then in progress in lieu of assumption or substitution in the event of a merger or sale of assets, the Board shall notify each participant in writing, at least ten days prior to the New Exercise Date, that the Exercise Date for his or her option has been changed to the New Exercise Date and that his or her option will be exercised automatically on the New Exercise Date, unless prior to such date he or she has withdrawn from the Offering Period as provided in paragraph 10. For purposes of this paragraph, an option granted under the Plan shall be deemed to be assumed if, following the sale of assets, merger or other reorganization, the option confers the right to purchase, for each share of Common Stock subject to the option immediately prior to the sale of assets, merger or other reorganization, the consideration (whether stock, cash or other securities or property) received in the sale of assets, merger or other reorganization by holders of Common Stock for each share of Common Stock held on the effective date of such transaction (and if such holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if such consideration received in such transaction was not solely common stock of the successor corporation or its parent (as defined in Section 424(e) of the Code), the Board may, with the consent of the successor corporation,

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provide for the consideration to be received upon exercise of the option to be solely common stock of the successor corporation or its parent equal in fair market value to the per share consideration received by holders of Common Stock in the sale of assets, merger or other reorganization.

The Board may, if it so determines in the exercise of its sole discretion, also make provision for adjusting the Reserves, as well as the price per share of Common Stock covered by each outstanding option, in the event that the Company effects one or more reorganizations, recapitalizations, rights offerings or other increases or reductions of shares of its outstanding Common Stock, and in the event of the Company being consolidated with or merged into any other corporation.

19. <u>Amendment or Termination</u>.

(a) The Board may at any time terminate or amend the Plan. Except as provided in paragraph 18, no such termination may affect options previously granted, nor may an amendment make any change in any option theretofore granted which adversely affects the rights of any participant provided that an Offering Period may be terminated by the Board on an Exercise Date or by the Board's setting a new Exercise Date with respect to an Offering Period then in progress if the Board determines that termination of the Offering Period is in the best interests of the Company and the stockholders or if continuation of the Offering Period would cause the Company to incur adverse accounting charges in the generally-accepted accounting rules applicable to the Plan. In addition, to the extent necessary to comply with Section 423 of the Code (or any successor rule or provision or any applicable law or regulation), the Company shall obtain stockholder approval in such a manner and to such a degree as so required.

(b) Without stockholder consent and without regard to whether any participant rights may be considered to have been adversely affected, the Board shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan.

20. <u>Notices</u>. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

21. <u>Conditions Upon Issuance of Shares</u>. Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

22. <u>Information Regarding Disqualifying Dispositions</u>. By electing to participate in the Plan, each participant agrees to provide any information about any transfer of shares of Common Stock acquired under the Plan that occurs within two years after the first business day of the Offering Period in which such shares were acquired as may be requested by the Company or any Subsidiaries in order to assist it in complying with the tax laws.

23. <u>Right to Terminate Employment</u>. Nothing in the Plan or in any agreement entered into pursuant to the Plan shall confer upon any Employee the right to continue in the employment of the Company or any Subsidiary, or affect any right which the Company or any Subsidiary may have to terminate the employment of such Employee.

24. <u>Rights as a Stockholder</u>. Neither the granting of an option nor a deduction from payroll shall constitute an Employee the owner of shares covered by an option. No Employee shall have any right as a stockholder unless and until an option has been exercised, and the shares underlying the option have been registered in the Company's share register.

25. <u>Term of Plan</u>. The Plan became effective upon its adoption by the Board on November 16, 2017 and shall continue in effect for a term of ten (10) years unless sooner terminated under paragraph 19.

26. <u>Applicable Law</u>. This Plan shall be governed in accordance with the laws of the State of Delaware, applied without giving effect to any conflict-of-law principles.

27. <u>Special Provisions for Initial Offering Period</u>. The following provisions of this paragraph 27 shall apply with respect to the Initial Offering Period notwithstanding any provision of the Plan to the contrary:

(a) Every eligible Employee shall automatically become a participant in the Plan for the Initial Offering Period at the highest percentage of Compensation permitted under paragraph 6. No payroll deductions shall be required for the Initial Offering Period; however, a participant may, at any time after the effectiveness of the Plan's registration statement on Form S-8, elect to have payroll deductions up to the aggregate amount which would have been credited to his or her account if a deduction of 10% of the Compensation which he or she received on each pay day during the Initial Offering Period had been made (the "Maximum Amount") or decline to participate, in either case, by giving written notice to the Company.

(b) Upon the automatic exercise of a participant's option on the Exercise Date for the Initial Offering Period, a participant shall be permitted to purchase shares with (i) the accumulated payroll deductions in his or her account, if any, (ii) a direct payment from the participant, or (iii) a combination thereof; provided, however that the total amount applied to the purchase may not exceed the lesser of (1) the Maximum Amount or (2) such amount as is necessary to comply with paragraph 6(c) hereof.

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